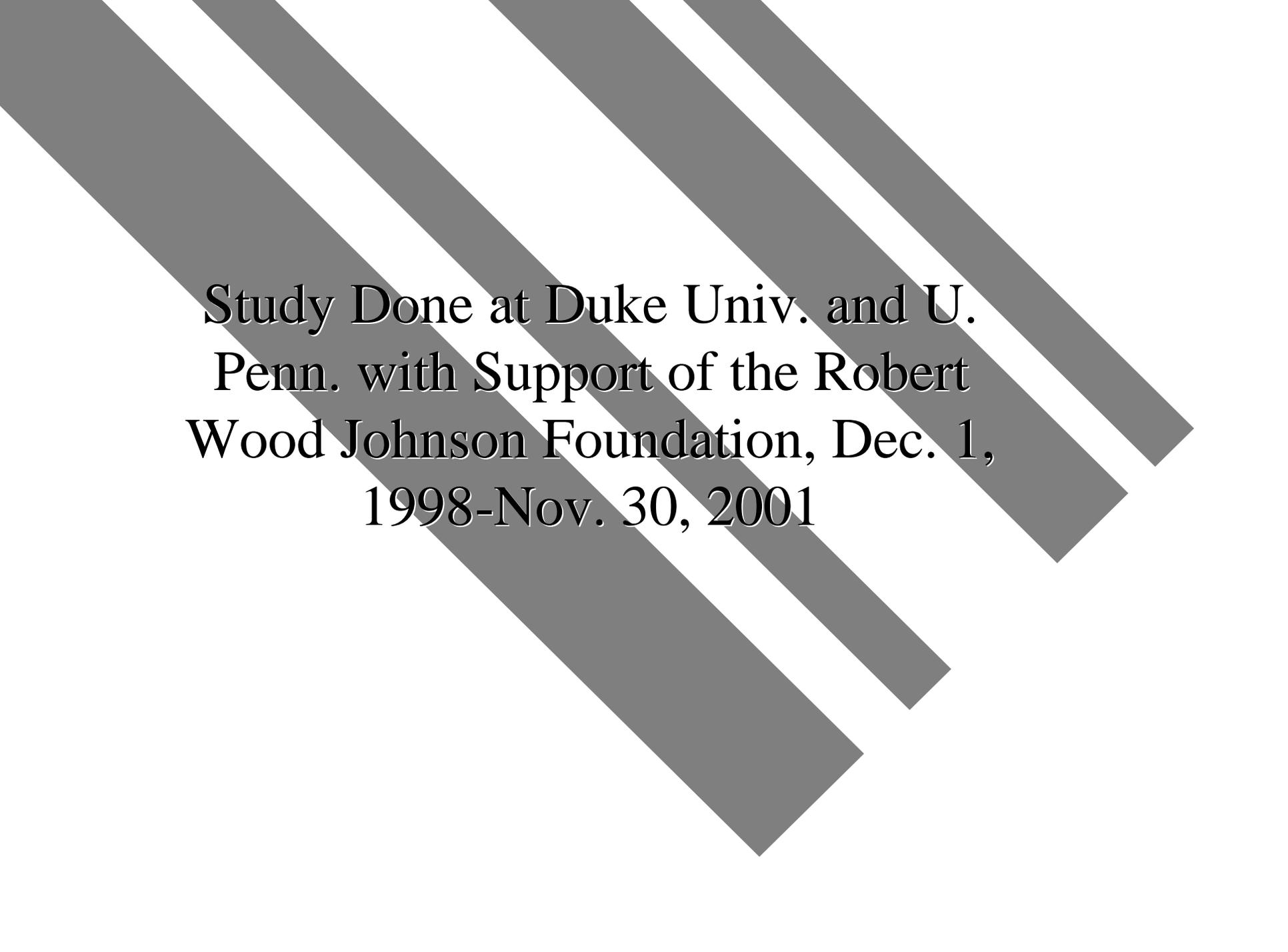


# Hospital Ownership Conversions

Presentation at Federal Trade Commission, April 10, 2003

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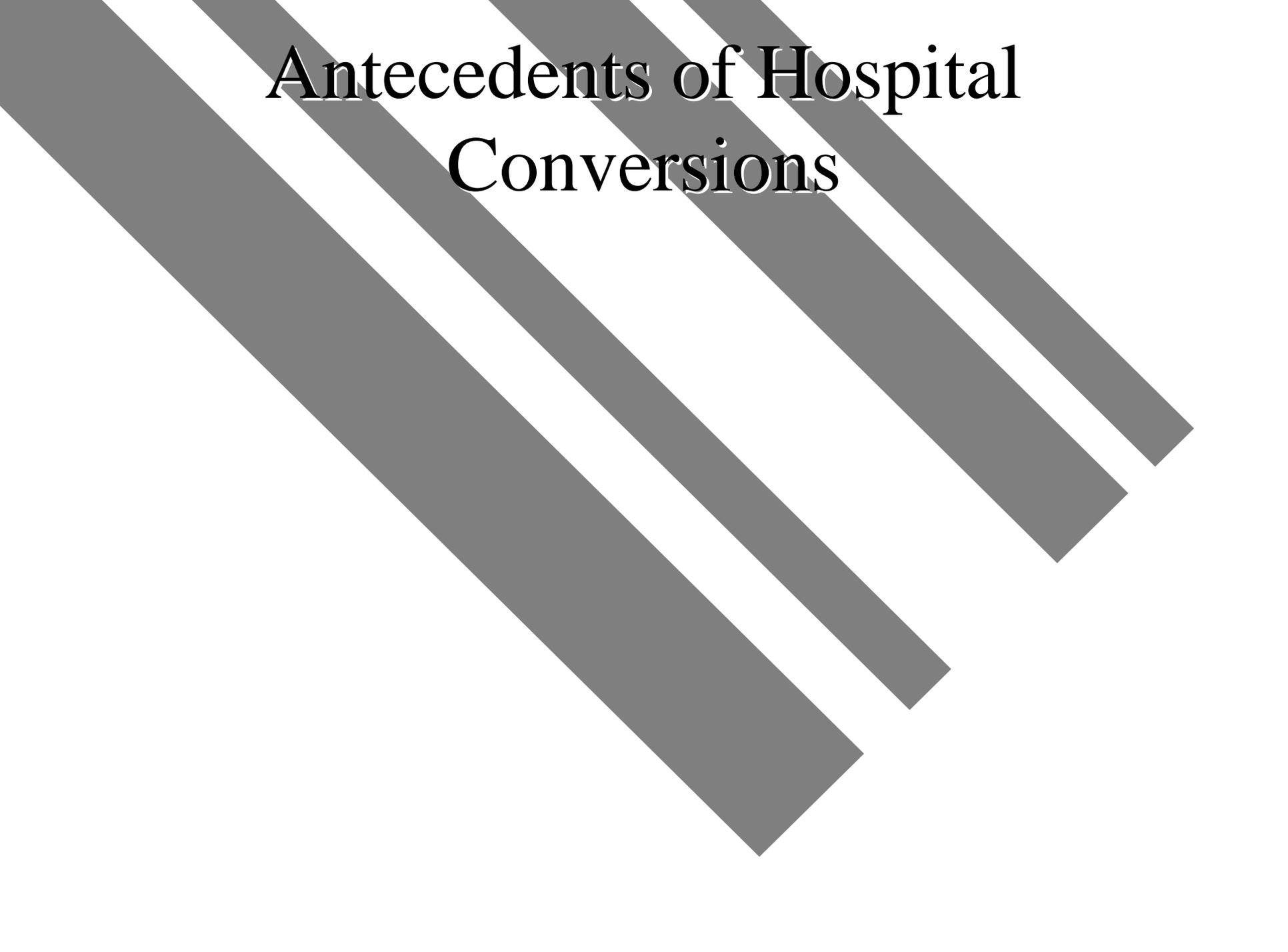
Study Done at Duke Univ. and U.  
Penn. with Support of the Robert  
Wood Johnson Foundation, Dec. 1,  
1998-Nov. 30, 2001

# Study Questions

- Why do some hospitals choose to convert, and why do they select a particular kind of change in ownership form?
- In which percentage of ownership conversions was a “fair” price paid for the hospital by the acquiring organization?
- How does conversion affect hospitals’ internal decision making processes?

# Study Questions, cont.

- How do health and financial outcomes compare among hospitals before versus after conversion?



# Antecedents of Hospital Conversions

# Methods

- Only studied changes in ownership form versus closing versus merger
- Using data from AHA supplemented by about 300 calls
- Studied period 1986-96 with year as the observational unit
- Used discrete time hazard model

# Key Findings

- Compared to hospitals that did not convert, merge or close, hospitals changing ownership status in 1985 had: much lower operating margins, lower occupancy rates; higher debt-assets suggesting financial push to convert
- Financial status in 1985 of hospitals that later closed even worse

## Key Findings, cont.

- Mergers often occurred in markets in which hospital sector less highly concentrated before the merger suggesting market power motive for merger



# Hospital Ownership Conversions

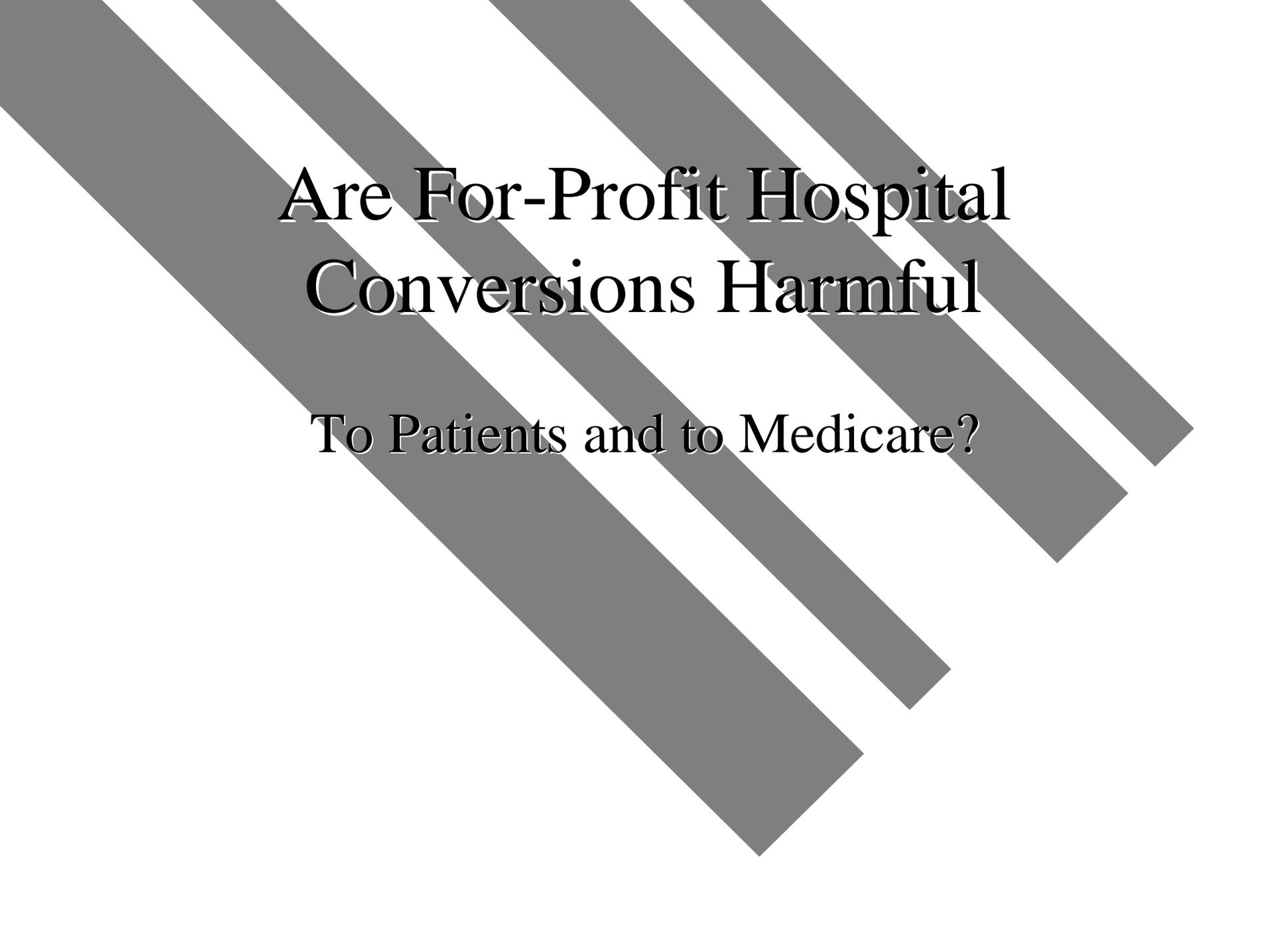
What effects on cost and quality?

# 3 Studies

- “Are For-Profit Hospital Conversions Harmful to Patients and to Medicare?” *Rand Journal of Economics*
- “Hospital Ownership Conversions: Defining the Appropriate Public Oversight Role,” in Garber, A., ed. *Frontiers in Health Policy Research*, MIT Press, 2002.

## 3 Studies, cont.

- “Does the Ownership of the Admitting Hospital Make a Difference? Comparing Outcomes and Process of Care of Medicare Beneficiaries Admitted with Myocardial Infarction,” submitted



# Are For-Profit Hospital Conversions Harmful

To Patients and to Medicare?

# Methods

- Data: Medicare claims data merged with survey data on same beneficiaries and hospital characteristics file including hospital ownership conversions and hospital financial characteristics
- Health outcomes measured: survival at 30 days, 6 months, and 1 year after hospital admission and Medicare payments for hospital stay

## Methods, cont.

- Also measured financial outcomes: margins, employment, wage-salaries
- Key explanatory variables: hospital ownership conversion from public or NFP to FP status and conversion from FP to public or NFP status

# Findings: Survival

- In hospitals that converted from public or NFP to FP status, there was a statistically significant increase in mortality rate at 1 year following conversion
- Effect persisted for first 2 years following conversion. Disappeared at 3+ years
- Similar pattern for mortality at 30 days and at 6 months post admission but effects not statistically significant at conventional levels

## Findings: Survival, cont.

- No effect on survival for hospitals converting from public or NFP to FP status
- Differing results on survival for the 2 directions of conversions imply that results reflect direction of ownership change rather than effect of ownership per se

# Findings: Financial Results

- Conversions from public or NFP to FP led to improved hospital operating margins
- For such hospitals, employment declined from 5+ years pre conversion with lowest level at 1-2 years post conversion, same period for which mortality increase observed
- Pattern even more obvious for real wages-salaries, implying reduction in skill mix

# Limitations

- Results could reflect period in which study conducted
- Only examined 1 dimension of outcomes of care, but did account for many other potential determinants of outcomes



# Hospital Ownership Conversions

Defining the Appropriate Public  
Oversight Role

# Methods

- Used hospital discharge abstract data from the Healthcare Cost and Utilization Project (HCUP)
- Included hospitalizations of persons of all ages
- Could only observe status at discharge
- Studied survival, pneumonia complications, length of stay, discharges to other hospitals, up-coding of diagnoses, expected source of payment

# Findings Showing No Difference

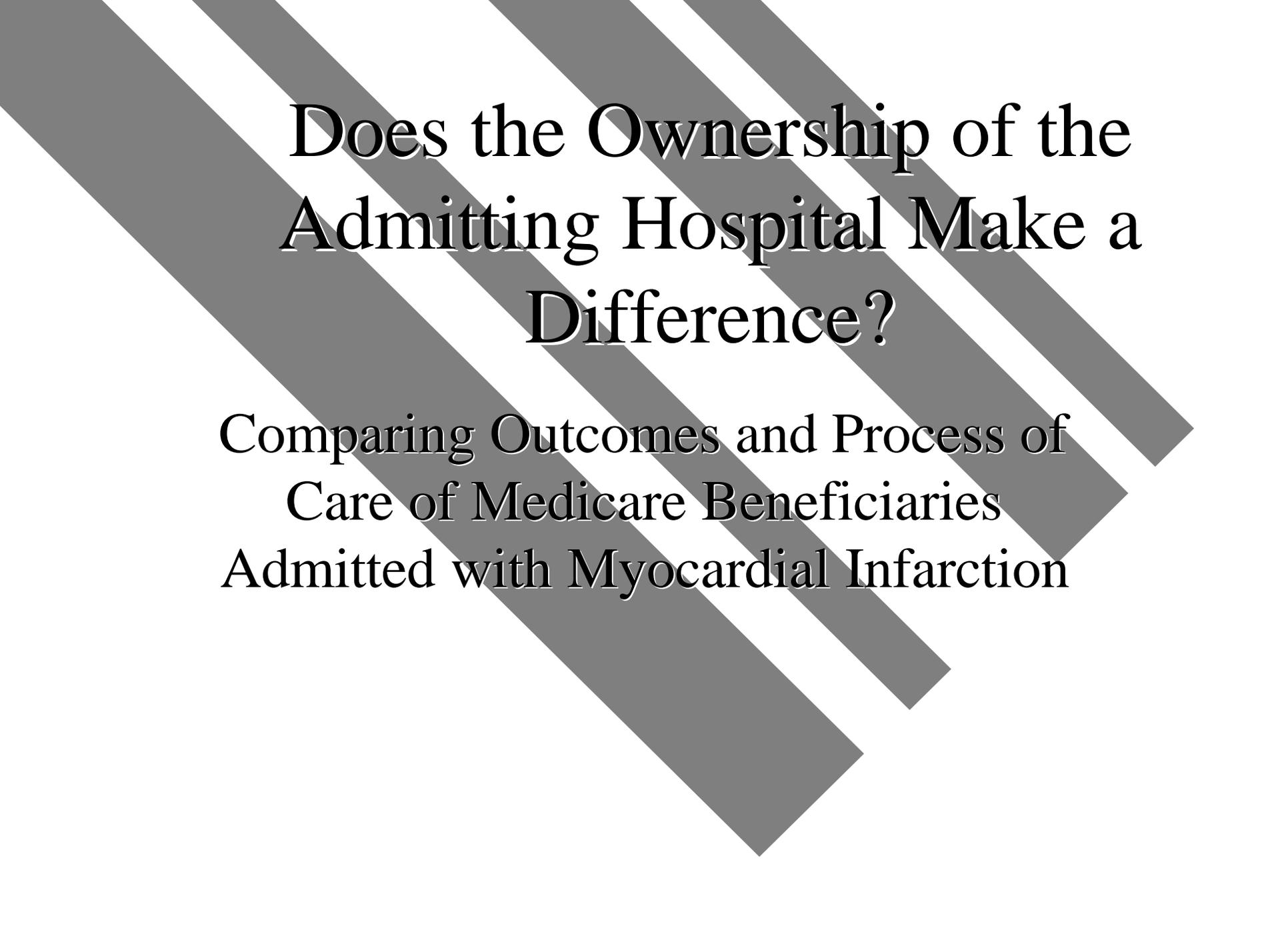
- Ownership conversion had no effect on inpatient mortality
- No evidence of up-coding of diagnoses for stroke, hip fracture, coronary heart disease, congestive heart failure, pneumonia

# Findings Favorable to Conversions to FP

- For patients aged 1-64 at admission, fraction of self-pay and public patients increased following conversion to FP
- Similar finding for sample of births
- Proportion of patients with very long stays declined among hospitals converting to FP
- On the whole, hospitals' missions seem to have been preserved post conversion

# One Negative Finding for Conversions to FP

- Pneumonia rates up post conversion



# Does the Ownership of the Admitting Hospital Make a Difference?

Comparing Outcomes and Process of  
Care of Medicare Beneficiaries  
Admitted with Myocardial Infarction

# Methods

- Patients admitted for a myocardial infarction
- Cooperative Cardiovascular Project (CCP)—years 1994-95, combining administrative data with data from charts, 250,000 records
- Studied effects of ownership rather than ownership conversion on survival at 30 days and at 1 year following admission and use of particular procedures

# Methods, cont.

- Controlled for many other factors: socio-demographic characteristics, clinical factors, etc.

# Findings

- No statistically significant differences in survival rates by hospital ownership
- Statistically significant differences in treatment patterns—patients at NFP hospitals more likely to aspirin and beta blockers; patients at FP hospitals more likely to get cardiac catheterization and bypass surgery

# Implications

- With FP get the same outcome but at a higher cost
- But we only measured 1 outcome—survival; possible that outcomes on other measures would have differed

# Summary of Findings

- In general, hospitals and communities pushed by financial pressures to convert: status quo would lead to unfavorable outcomes including hospital closure
- No evidence that conversions have negative effect of patient access to care—hospital missions not changed post conversion (both interviews and statistical analysis)
- Evidence on effect of conversions on cost is mixed

# Summary of Findings, cont.

- Evidence on effect of conversions on quality also mixed but there are “red flags”

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